Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A spacing apparatus for use with a brachytherapy device for treating target tissue surrounding a surgical extraction site, comprising:

an insertion member having a proximal end and a distal end;

a spacing element disposed on the distal end of the insertion member,

the spacing element having a predeterminable height and being adapted to position a brachytherapy device disposed within a surgical extraction site at a distance apart from tissue surrounding the surgical extraction site, the distance being equal to the height of the spacing element.

- 2. (Original) The spacing apparatus of claim 1, wherein the spacing element is movable between a closed position in which the spacing element is disposed adjacent the insertion member, and an open position in which the spacing element extends outward from the insertion member.
- 3. (Original) The spacing apparatus of claim 2, wherein the spacing element in the open position is effective to position a brachytherapy device disposed within a surgical extraction site at a distance apart from tissue surrounding the surgical extraction site.
- 4. (Original) The spacing apparatus of claim 3, wherein the spacing element comprises an expandable balloon member disposed on a portion of the insertion member.

Winkler et al.

Appl. No.: 10/750,921 Filed: December 31, 2003

Page 3

5. (Original) The spacing apparatus of claim 4, wherein the expandable balloon member is

inflated in the open position, and is deflated in the closed position, wherein the expandable

balloon member has a predetermined shape in the open position such that, when inflated, the

balloon member is effective to position the brachytherapy device at a predeterminable distance

apart from tissue surrounding the surgical extraction site, and wherein the insertion member

includes an inner inflation lumen and a port communicating with the lumen and an interior

portion of the balloon.

6. (Original) The spacing apparatus of claim 5, wherein the predetermined shape of the

expandable balloon member is substantially disk-shaped.

7. (Original) The spacing apparatus of claim 3, wherein the spacing element is formed of a shape

memory material and is biased to the open position, and wherein the spacing element has a three-

dimensional shape in the open position, and a substantially folded shape in the closed position.

8. (Original) The spacing apparatus of claim 7, wherein the spacing element is disk-shaped in the

open position.

9. (Original) The spacing apparatus of claim 3, wherein the spacing element is effective to form a

radio-opaque barrier between the brachytherapy device and the tissue surrounding the surgical

extraction site.

Winkler et al. Appl. No.: 10/750,921 Filed: December 31, 2003

Page 4

10. (Original) The spacing apparatus of claim 1, wherein the spacing element is formed

integrally with the distal end of the insertion member.

11. (Original) The spacing apparatus of claim 10, wherein the spacing element is formed of a

shape memory material, the spacing member having a first shape in a closed position for

inserting the spacing element into a surgical extraction site, and a second shape in an open

position, the spacing member being deployable into the open position in the surgical extraction

site for positioning the brachytherapy device at a predetermined distance apart from sensitive

tissue.

12. (Withdrawn) A brachytherapy device, comprising: an insertion member having a proximal

end and a distal end;

an expandable surface member disposed on the distal end of the insertion member and

effective to receive a radiation source for treating target tissue surrounding a surgical extraction

site:

a spacing element disposed in conjunction with the insertion member, the spacing

element having a predeterminable height and being adapted to position the first expandable

balloon member at a distance apart from tissue surrounding the surgical extraction site, the

distance being equal to the height of the spacing element.

13. (Withdrawn) The brachytherapy device of claim 12, wherein the spacing element is movable

between a closed position in which the spacing element is disposed adjacent the insertion

Winkler et al.

Appl. No.: 10/750,921 Filed: December 31, 2003

Page 5

member, and an open position in which the spacing element extends outward from the insertion

member.

14. (Withdrawn) The brachytherapy device of claim 13, wherein the first expandable balloon

member, upon inflation, is effective to move the spacing element to the open position.

15. (Withdrawn) The brachytherapy device of claim 14, wherein the spacing element in the open

position is effective to position the first expandable balloon member at a distance apart from

tissue surrounding the surgical extraction site.

16. (Withdrawn) The brachytherapy device of claim 13, wherein the spacing element comprises

a second expandable balloon member.

17. (Withdrawn) The brachytherapy device of claim 16, wherein the second expandable balloon

member is expanded in the open position, and is deflated in the closed position, and wherein the

second expandable balloon member has a predetermined shape in the open position such that,

when inflated, the balloon member is effective to position the brachytherapy device at a

predeterminable distance apart from tissue surrounding the surgical extraction site.

18. (Withdrawn) The brachytherapy device of claim 17, wherein the predetermined shape of the

second expandable balloon member is substantially disk-shaped.

Winkler et al. Appl. No.: 10/750,921 Filed: December 31, 2003

Page 6

19. (Withdrawn) A brachytherapy positioning system, comprising: a brachytherapy device for

treating target tissue surrounding a surgical extraction site; a spacing apparatus comprising a

spacing element having a predeterminable height and being adapted to position the

brachytherapy device at a distance apart from tissue surrounding the surgical extraction site, the

distance being equal to the height of the spacing element.

20. (Withdrawn) The brachytherapy positioning system of claim 19, further comprising an

insertion member having a proximal end and a distal end, the spacing element being disposed on

the distal end of the insertion member.

21. (Withdrawn) The brachytherapy system of claim 20, wherein the spacing element is movable

between a closed position in which the spacing element is disposed adjacent the insertion

member, and an open position in which the spacing element extends outward from the insertion

member.

22. (Currently amended) A brachytherapy positioning system, comprising:

a brachytherapy device for treating target tissue surrounding a surgical extraction site;

a spacing apparatus comprising a spacing element having a predeterminable height and

being adapted to position the brachytherapy device at a distance apart from tissue surrounding

the surgical extraction site, the distance being equal to the height of the spacing;

an insertion member having a proximal end and a distal end, the spacing element being

disposed on the distal end of the insertion member, wherein the spacing element is movable

Winkler et al. Appl. No.: 10/750.921

Filed: December 31, 2003

Page 7

between a closed position in which the spacing element is disposed adjacent the insertion

member, and an open position in which the spacing element extends outward from the insertion

member and The spacing apparatus of claim 21, wherein the spacing element in the open

position is effective to position the brachytherapy device at a distance apart from tissue

surrounding the surgical extraction site.

23. (Currently amended) The brachytheraphy positioning spacing apparatus system of claim 22,

wherein the spacing element comprises an expandable balloon member disposed on a portion of

the insertion member.

24. (Currently amended) The brachytheraphy positioning spacing apparatus system of claim 23,

wherein the expandable balloon member is inflated in the open position, and is deflated in the

closed position, and wherein the expandable balloon member has a predetermined shape in the

open position such that, when inflated, the balloon member is effective to position the

brachytherapy device at a predeterminable distance apart from tissue surrounding the surgical

extraction site.

25. (Currently amended) The brachytheraphy positioning spacing apparatus system of claim 24,

wherein the predetermined shape of the expandable balloon member is substantially disk-shaped.

26. (Currently amended) The brachytheraphy positioning spacing apparatus system of claim 22,

wherein the spacing element has a three-dimensional shape in the open position, and a

Winkler et al.

Appl. No.: 10/750,921 Filed: December 31, 2003

Page 8

substantially folded shape in the closed position, and wherein the spacing element is formed of a

shape memory material and is biased to the open position.

27. (Currently amended) The brachytheraphy positioning spacing apparatus system of claim 26,

wherein the spacing element is disk-shaped in the open position.

28. (Currently amended) The brachytheraphy positioning spacing apparatus system of claim

[[19]] 22, wherein the spacing element is effective to form a radio-opaque barrier between the

brachytherapy device and the tissue surrounding the surgical extraction site.

29. (Currently amended) The brachytheraphy positioning spacing apparatus system of claim

[[20]] 22, wherein the spacing element is formed integrally with the distal end of the insertion

member.

30. (Currently amended) The brachytheraphy positioning spacing apparatus system of claim 29,

wherein the spacing element is formed of a shape memory material, the spacing member having

a first shape in a closed position for inserting the spacing element into a surgical extraction site,

and a second shape in an open position, the spacing member being deployable into the open

position in the surgical extraction site for positioning the brachytherapy device at a

predetermined distance apart from sensitive tissue.

31. (Withdrawn) A method for positioning a brachytherapy device at a distance apart from

Winkler et al.

Appl. No.: 10/750,921 Filed: December 31, 2003

Page 9

sensitive tissue proximate to a surgical extraction site, comprising: introducing a spacing

apparatus into a surgical extraction site, the spacing apparatus having a predeterminable height

and being adapted to position a brachytherapy device at a distance apart from tissue surrounding

the surgical extraction site; and introducing a brachytherapy device into the surgical extraction

site, the brachytherapy device being effective for treating target tissue within the surgical

extraction site; positioning the spacing apparatus with respect to the brachytherapy device so as

to position the brachytherapy device at a distance apart from sensitive tissue proximate to the

surgical extraction site, the distance being equal to the height of the spacing apparatus.

32. (Withdrawn) The method of claim 31, wherein the spacing apparatus and the brachytherapy

device are introduced into a surgical extraction site through a single entrance port extending into

the surgical extraction site.

33. (Withdrawn) The method of claim 32, wherein the spacing apparatus is mated to the

brachytherapy device.

34. (Withdrawn) The method of claim 31, wherein the spacing apparatus is introduced through a

first entrance port extending into the surgical extraction site, and the brachytherapy device is

introduced through a second entrance port extending into the surgical extraction site.

35. (Withdrawn) The method of claim 31, wherein the spacing apparatus comprises: an insertion

member having a proximal end and a distal end; and a spacing element being disposed on the

Winkler et al.

Appl. No.: 10/750,921 Filed: December 31, 2003

Page 10

distal end of the insertion member, the spacing element having a predeterminable height and

being adapted to position the brachytherapy device at a distance apart from tissue surrounding

the surgical extraction site, the distance being equal to the height of the spacing element

36. (Withdrawn) A method for positioning a brachytherapy device at a distance apart from

sensitive tissue proximate to a surgical extraction site, comprising: introducing a brachytherapy

device into a surgical extraction site, the brachytherapy device comprising: an insertion member

having a proximal end and a distal end, a first expandable balloon member disposed on the distal

end of the insertion member and effective to receive a radiation source for treating target tissue

surrounding a surgical extraction site, and a spacing element disposed on the insertion member

proximal to the first expandable balloon member, the spacing element having a predeterminable

height; inflating the first expandable balloon member; and applying radiation to the surgical

extraction site to treat target tissue surrounding the surgical extraction site; wherein the spacing

element is effective to position the first expandable balloon member at a predeterminable

distance apart from sensitive tissue proximate to the surgical extraction site, the distance being

equal to the height of the spacing element.

37. (Withdrawn) A method for positioning a brachytherapy device at a distance apart from

sensitive tissue proximate to a surgical extraction site, comprising: resecting a tumor site to

create an extraction site; introducing a brachytherapy device into the extraction site, the

brachytherapy device comprising: an insertion member having a proximal end and a distal end, a

first expandable balloon member disposed on the distal end of the insertion member and

Winkler et al.

Appl. No.: 10/750,921 Filed: December 31, 2003

Page 11

element.

effective to receive a radiation source for treating target tissue surrounding a surgical extraction site, and a spacing element disposed on the insertion member proximal to the first expandable balloon member, the spacing element having a predeterminable height; inflating the first expandable balloon member; and applying radiation to the extraction site to treat target sensitive tissue surrounding the extraction site; wherein the spacing element is effective to position the first expandable balloon member at a predeterminable distance apart from sensitive tissue proximate to the surgical extraction site, the distance being equal to the height of the spacing